



9 May 2007

INFORMATION PAPER

SUBJECT: Kawainui Marsh Flood Control, Oahu, Hawaii

- 1. Purpose: To provide information on the subject project for HQUSACE staff visit.
- 2. Points of Major Interest and Facts.
- a. Kawainui Marsh is located in Kailua on the windward coast of the island of Oahu. The project was authorized under Section 205 of the Flood Control Act of 1948, as amended. The local sponsor is the Department of Public Works, City and County of Honolulu (C&C). Maintenance for the levee and marsh will be transferred from the C&C to the State of Hawaii Department of Land and Natural Resources (DLNR) as part of an agreement to allow the U.S. Army Corps of Engineers (USACE) and DLNR to construct an Ecosystem Restoration Project (Section 1135) in the marsh headwaters. The transfer agreement was signed by the C&C and DLNR on 5 April 2007. However, the principal O&M responsibility of the C&C is in accordance with the Local Cooperation Agreement for the entire project remains intact and unaltered.
- b. The original flood control project was constructed by the U.S. Army Corps of Engineers in August 1966. The project included a trapezoidal channel 9,470 feet long and 80 to 110 feet wide; an earth levee totaling 6,850 feet; a stub groin 50 feet long; a shore revetment 50 feet long; a silt basin 370 feet long; and drainage outlets.
- c. In January 1988 the project was overtopped due to changed conditions in the marsh and the community of Coconut Grove sustained severe flood damages. As a result of the "New Years Flood", a construction contract to raise the levee was awarded in September 1994 and completed in June 1997. The completed project consisted of a combination earth levee raise and concrete floodwall. The floodwall has a maximum height of four feet and is 6,300 feet long extending from Kailua Road on the south to the Oneawa outlet channel on the north. The levee fills 1.8 acres of wetland fringe. The plan included mitigation for wetland fill by creation of an equivalent amount of wetland on the marsh side of the levee. The total project cost was \$5,918,000 (Federal: \$4,143,000; non-Federal: \$1,775,000).
- d. The project is inspected annually by the staff of the City and County of Honolulu and the Honolulu District. The last inspection of the project was in October 2006. The facility has been maintained in acceptable condition without any detrimental conditions which would affect its flood control functions.